

Application No.: 10/573,682

Amendment dated February 1, 2010 Reply to Office Action of September 30, 2009

Attorney Docket No.: M04B132

### **AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawings includes changes to FIG. 10. This sheet, which includes FIGs. 9-10, replaces the original sheet including FIGs. 9-10. In FIG. 10, previously omitted label 2 has been added.

Attachments: Replacement Sheet

Annotated Sheet Showing Changes

## **REMARKS**

Claims 1-20 remain pending in the application, in which claims 1 and 16 are currently amended. No claim is currently cancelled, or added. Applicants respectfully request for allowance of all pending claims 1-20 based on following discussions.

### **Drawings Objections**

The drawings are objected to because ports (2) are missing from FIG. 10. In response, the label “2” indicating the ports is added to FIG. 10 as shown in the attached drawing sheets. Accordingly, Applicants respectfully request that the objections be withdrawn.

### **Rejections under 35 USC 102**

Claims 1, 12, 13, 17, and 20 are rejected under 35 USC 102(e) as being anticipated by PCT Patent Application Publication No. WO2004/005720 to Stellnert (hereinafter referred to as “Stellnert”).

Independent claim 1 is directed to a method for managing deposits within a pump mechanism by introducing fluid suitable for dissolving, diluting or otherwise disengaging deposits which have accumulated on the internal working surfaces of the pump, the method comprising the steps of: (a) monitoring the performance of the pump; (b) receiving process data from, or directly associated with, a tool being evacuated by the pump; (c) calculating fluid flow characteristics required to compensate for the accumulation of deposits on the internal working surfaces of the pump based on the monitored performance and the process data; and (d) introducing fluid into the pumping mechanism in accordance with the calculated characteristics.

Examiner asserts, among other things, that Stellnert teaches the claim language “receiving process data from, or associated with, a tool being evacuated by the pump.”

*See, the Office Action, page 3.* Applicants, however, respectfully disagree.

Stellnert teaches detection means arranged to detect at least one operation condition related to the operation of said **vacuum pump**. *See, Stellnert, page 4, lines 18-25.* On the other hand, the claimed invention, as amended, discloses receiving process data from, or directly associated with, a **tool** being evacuated by the pump. A vacuum pump does not equate to a tool, and data associated with a vacuum pump are certainly different from those associated with a tool being evacuated by the pump. For example as illustrated in FIG. 2 of Stellnert, temperature sensor 6 measures the temperature of the gas at outlet 5 of the vacuum pump 1. The temperature reading would be certainly different from that of the gas in a tool being evacuated by the vacuum pump 1. Thus, temperature sensor 6 does not provide process data associated with the tool, at least not in a direct manner.

The claimed invention is advantageous over Stellnert, because it takes into account of the tool conditions in calculating about how the cleaning fluid is to be introduced to the vacuum pump. For example where the process material is a by-product of a CVD process, a fluorinated gas, such as  $\text{ClF}_3$ ,  $\text{F}_2$ , and  $\text{NF}_3$ , may be selected as the cleaning gas. *See, the specification, page 8, lines 9-11.* It is therefore clear that the claimed invention is capable of providing vacuum pumps with more efficient and effective cleaning than Stellnert. Thus, Applicants respectfully submit that independent claim 1 is not anticipated by Stellnert under 35 USC 102(e).

Independent claim 17 is directed to a pumping arrangement comprising “*means for receiving process data from a tool adapted to be evacuated by the pump.*” For the reasons discussed above, independent claim 17 is not anticipated by Stellnert under 35 USC 102(e), either.

Claims 12, 13, and 20 depend from claim 1 and include all limitations recited therein. Accordingly, they are patentable over Stellnert under 35 USC 102(e).

### **Rejections under 35 USC 103**

Claims 2-10, 14-16, and 18, 19 are rejected under 35 USC 103(a) as being unpatentable over Stellnert in view of US Patent Application Publication No. 2002/0034880 to Sakai (hereinafter referred to as “Sakai”), US Patent No. 5,718,565 to Kuhn (hereinafter referred to as “Kuhn”), and US Patent No. 6,224,326 to Puech (hereinafter referred to as “Puech”).

Claims 2-10, 14-16, and 18, 19 depend from independent claim 1, and include all limitations recited therein. Accordingly, they are patentable over Stellnert in view of Sakai, Kuhn, and Puech under 35 USC 103(a).

## CONCLUSION

Applicants have made an earnest attempt to place this application in an allowable form. In view of the foregoing remarks, it is respectfully submitted that the pending claims are drawn to a novel subject matter, patentably distinguishable over the prior art of record. Examiner is therefore, respectfully requested to reconsider and withdraw the outstanding rejections.

Should Examiner deem that any further clarification is desirable, Examiner is invited to telephone the undersigned at the below listed telephone number.

Applicants do not believe that any additional fee is due, but as a precaution, the Commissioner is hereby authorized to charge any additional fee to deposit account number 50-4244.

Respectfully submitted,

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